TRENDS IN SHARED MOBILITY

Cities Are Struggling To Manage Public Space During The Shared-Mobility Tsunami
With billions of dollars in start-up investment capital and aggressive marketing / expansion strategies, start up shared mobility companies are deploying their dockless fleets throughout unprepared cities across the globe.

In response to the 2018 Shared Mobility tsunami of scooters and bikes, Santa Monica and other Southern California cities have adopted, and most South Bay cities are considering, emergency interim ordinances and permitting regulations to restrict and regulate shared mobility devices. For example, the Santa Monica City Council Item is available at:


Buried in the details of the Santa Monica Council item is a new commitment by the city to control its sidewalks and curbs which are quickly becoming contested urban real estate. Santa Monica wants these mobility startups to be better partners, since city officials have embraced scooters as part of its overall transportation plan. The plan notes that scooters can help the city reduce congestion and emissions. A Bird spokesman noted that since the company launched nine months ago, riders have taken 577,930 rides. If just half of those Bird rides replaced a one-mile car trip, then according EPA data, Santa Monica riders have saved 257,372 pounds of carbon emissions.

Cities are beginning to grasp the potential future of urban transportation which will need to accommodate a greater share of trips being made via shared mobility services. Scooters and dockless bikes are competing for the curb space with ridehailing, transit, liveable/complete streets, parking and deliveries. Cities are struggling to maintain travel speeds, person throughput and capacity while safely operating their public spaces. The new statewide environmental planning focus on reducing vehicle miles travelled, rather than reducing vehicle delays and intersection congestion, has opened the floodgates of public policy discourse on the future use and regulation of public streets, curbs and sidewalks.

By regulating how the new transportation options will use public rights of way, cities can assert their public authority to bring about a more sustainable, multimodal, and less car-centric mobility future by better balancing public use of the contested space
where companies, citizens, and the government are jockeying for space for transportation, commerce, and delivery.

Most of the shared mobility companies have introduced their services without permission from the city. Their business models don’t include the cost of public fees or permits to pay for street maintenance, enforce safety rules, or share the ridership data that cities could use to plan better and more efficient transportation systems. As a result, cities are paying for and providing the public infrastructure—roads, sidewalks, and curbs and underpinning this private gain.

But with the widespread adoption of mobile technology and GPS, cities and the private sector operators have an opportunity to implement innovative management strategies like a “self-adjusting curb” with new laws and safety regulations. These concepts, referred to as “flex-zones” by the National Association of City Transportation Officials (NACTO) or Shared-Use Mobility Zones by the Eno Transportation Foundation, envision cities using rules and technology to give different transit options priority.

Washington, D.C., launched a successful trial in 2017 to regulate pick-up and drop-offs around the busy DuPont Circle area. San Francisco has used geo-fencing tools to “nudge” riders of Uber and Lyft to request pick-ups and drop-offs in designated zones to reduce congestion. Seattle has adopted proposed design guidelines that follow a flex zone framework. First, designate transit stops, transit lanes, and bikeways. Then, find spaces for bike share stations, commercial loading, perhaps geo-fenced areas for dockless vehicles. Then, fill in the blanks with parklets and pick-up and drop-off spaces for ridehailing and private vehicles. Finally, include an array of short-term car storage options via parking regulations.

Santa Monica is pursuing public private partnerships with the shared mobility companies. The city wants an “open and productive partnership,” recognizing that scooters and other dockless vehicles can help the city achieve sustainability goals and offer a highly desired option for shorter trips. Companies vying for a spot in Santa Monica’s 16-month pilot program for shared mobility devices are evaluated on seven criteria, including safety, operations requirements, and data sharing. Each of the seven categories has minimum and recommended benchmarks. Operators are encouraged to offer low-income and multilingual options, create a system that recognizes geo-fenced parking areas dedicated to decreasing vehicle clutter, and provide real-time fleet info to the city. After some debate, the city approved a dynamic model for capping scooters based on vehicle utilization; both Bird and Lime issued statements praising the new framework.

Other cities, looking to control traffic and fund the infrastructure used by these companies, have started to levy fees and rules on tech companies. A new fee Chicago officials added to Uber and Lyft rides will direct millions of dollars towards public transit investment, while designated drop-off spots are being tested in other cities to help avoid congestion.
As these new mobility companies invest in larger fleets—and make private car ownership less attractive—cities will find more and more financial reasons to take control of the curb. Cities need to prepare for the shift, and figure out how to price curb use to both control traffic, adequately maintain and enforce use of the public space, and make up for any lost parking revenue.

Many companies seem interested in working with cities toward these goals. Uber, Lyft, and many dockless bike companies signed a Livable Cities Pledge, promising to support the shared and efficient use of “vehicles, lanes, curbed, and land,” as well as push for open data and fair user fees. Bird promoted a Save Our Sidewalks pledge which suggests that these companies pay cities $1 per vehicle per day for infrastructure improvements A recent app redesign from Lyft seeks to promote shared rides, and the company’s new goal to have shared rides account for half of all trips on the platform by 2020.

**Will Little Vehicles Conquer the City?**

Call them Little Vehicles—not just bikes and scooters, but e-bikes, velomobiles, motorized skateboards, unicycles, “hoverboards,” and other small, battery-powered low-speed not-a-cars. Some futurists predict Little Vehicles (LVs) could significantly erode private car and ride-hail use, and play a key role in helping cities achieve their environmental and road safety goals.

SBCCOG and South Bay cities have been in the forefront of evaluating the vehicles and their potential for short trips with our NEV study, South Bay Slow Speed Network development, the current Bike Share Working Group and the June 28th SB Cities Bicycle + E-Mobility Expo.

Getting to mass adoption will require Little Vehicles for all seasons, for all sorts of trips, and for all types of people. Have a Go, which aspires to be the *Consumer Reports* of LVs, categorizes these electric powered vehicles into three categories based on size, ranging from unicycles and motorized skateboards, to folding bikes and scooters, to enclosed velomobiles and featherweight cars.

Just as electrification is important for air quality, LVs are important to urban mobility. The National Association of City Transportation Officials (NACTO) estimates that 7,500 bikes can pass through a single 10-foot lane in an hour, compared to between 600 and 1,600 cars. (Presumably, even more scooters could fit through that lane.) And even on shared streets, when traffic piles up at an intersection, many Little Vehicles can filter their way to the front of the queue.

Despite the industry’s efforts to encourage more pooled rides, ride-hailing services have been shown to increase vehicle miles traveled (i.e., traffic) in major American cities. Adding self-driving to this mix likely won’t change the math much, and autonomous for-hire cars also won’t be able to solve the problem of moving a lot of people through dense cities. That’s the rationale behind Uber’s recent purchase of JUMP, the dockless electric bikeshare company.
This new focus for the former ride-hailing—now “mobility”—giants is in part a response to problems they helped create. In San Francisco, Sacramento, and Washington, D.C., where Uber users can access JUMP bikes directly from the Uber app, the company has seen people switching over and increasing their share of rides they're doing on JUMP versus Uber. What Uber, Lyft, and venture capital firms are really excited about is the potential for the Little Vehicle sector to have a similar growth trajectory as the ride-hailing industry.

Lime is finding that battery-boosted bikes and scooters are able to attract more riders per day than traditional bikes, but they also found that when scooters are introduced to a market, bike usage also increases. Additionally, a recent survey found that 75 percent of dockless bikeshare riders in Seattle used the service to access transit.

Adding protected bike lanes and designated Little Vehicle parking areas can be accomplished quickly and relatively cheaply, as infrastructure investment goes—if voters and city leaders are all on the same page. The well-capitalized Little Vehicle industry can also help pay for these changes, as evidenced by Bird’s Save Our Sidewalks pledge. Future city permits could offer expanded fleet sizes in exchange for infrastructure contributions. And congestion pricing strategies will make Little Vehicles more attractive to users and planners alike.